



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Adopt a Resolution Authorizing the Non-competitive Purchase of a Supervisory, Control and Data Acquisition (SCADA) System and Software Upgrade from Siemens/TeleGyr Systems, Inc. (\$165,000.00) (EUD)

MEETING DATE: May 2, 2001

PREPARED BY: Electric Utility Director

RECOMMENDED ACTION: That City Council adopt a resolution authorizing the non-competitive purchase of a replacement/upgrade of the master station and software for the City's Supervisory, Control and Data Acquisition (SCADA) from Siemens/TeleGyr Systems, Inc.

BACKGROUND INFORMATION: The present SCADA system was purchased in 1989 from Landis & Gyr, now Siemens/TeleGyr Systems, Inc., to provide for the automatic control and monitoring of the City of Lodi's Electric and Water Systems. However, since 1989, new substations, water wells, electric circuits, storm pumps and sewage lift stations have been installed to provide for the city's growth. As a result of additional equipment being added, the present SCADA system has reached its operational capacity due to lack of memory in the master station. Memory expansions are not available for this system. Other critical hardware components are no longer available. In addition, the new technology and features that would enhance the operation of the City's Water and Electric systems, i.e. improved efficiency and response time cannot be adapted to our present SCADA system.

After careful research, the department has determined that an upgrade from Siemens/TeleGyr Systems, Inc. to the existing master station is in the best interest of the City of Lodi for the following reasons:

It allows the use of three master station protocols simultaneously. One, of which, is currently being used by the present Scada master station and Remote Terminal Units (RTU's). This eliminates the mandatory requirement for either a protocol change or an emulation of a proprietary protocol, as would be the case if any of the other vendors were selected. It eliminates the need to spend any labor dollars changing the protocol at the substations, water wells, storm pumps and sewage lift stations. It allows for a seamless switchover from the old SCADA system to the new SCADA system.

Both systems are allowed to run in parallel to insure that the new SCADA system works to our satisfaction. This provides the City of Lodi with the option of waiting until the new SCADA system is fully operational before the old system is shut down.

The Siemens/TeleGyr system upgrade requires less hardware, thereby, reducing the opportunity for system failures. The Siemens/TeleGyr system upgrade provides for faster takeover from failure of the on line unit due to the speed in which each server is updated. Less training is needed due to familiarity and present use of the Siemens/TeleGyr equipment.

This resolution would authorize the purchase of the SCADA system from Siemens/TeleGyr for \$165,000.00 under City Code Section 3.20.070 ("Bidding shall be dispensed with when the City Council determines that the purchase or

APPROVED:

A handwritten signature in black ink, appearing to read "H. Dixon-Flynn".

H. Dixon-Flynn - City Manager



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method of purchase would be in the best interests of the City").

FUNDING: Included in the 1999-2001 Financial Plan and Budget (page E-20).

Funding Approval:

Ruby R. Pante for
Vicky McAthie, Finance Director

Alan N. Vallow
Alan N. Vallow
Electric Utility Director

PREPARED BY: Ermon Harris, Utility Operations Supervisor

ANV/EH/1st

C: City Attorney
Finance Director

APPROVED: _____

H. Dixon Flynn - City Manager

RESOLUTION NO. 2001-99

A RESOLUTION OF THE LODI CITY COUNCIL AUTHORIZING THE
NON-COMPETITIVE PURCHASE OF A SUPERVISORY, CONTROL
AND DATA ACQUISITION (SCADA) SYSTEM AND SOFTWARE
UPGRADE FROM SIEMENS/TELEGYR SYSTEMS, INC.

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WHEREAS, Lodi Municipal Code, §3.20.070, authorizes dispensing with bids for purchases of supplies, services or equipment when it is in the best interest of the City to do so; and

WHEREAS, the present SCADA system was purchased in 1989 from Landis & Gyr, now Siemens/TeleGyr Systems, Inc., to provide for the automatic control and monitoring of the City of Lodi's Electric and Water Systems; and

WHEREAS, since 1989, new substations, water wells, electric circuits, storm pumps, and sewage lift stations have been installed to provide for the City's growth. As a result of additional equipment being added, the present SCADA system has reached its operational capacity due to lack of memory in the master station; and

WHEREAS, memory expansions are not available for this system. Other critical hardware components are no longer available. In addition, the new technology and features that would enhance the operation of the City's Water and Electric Systems, i.e. improved efficiency and response time, cannot be adapted to our present SCADA system; and

WHEREAS, after careful research, the department has determined that an upgrade from Siemens/TeleGyr Systems, Inc. to the existing master station is in the best interest of the City of Lodi for the following reasons:

- 1) It allows the use of three master station protocols simultaneously, one of which is currently being used by the present SCADA master station and Remote Terminal Units (RTU's). This eliminates the mandatory requirement for either a protocol change or an emulation of a proprietary protocol, as would be the case if any of the other vendors were selected. It eliminates the need to spend any labor dollars changing the protocol at the substations, water wells, storm pumps, and sewage lift stations. It allows for a seamless switchover from the old SCADA system to the new SCADA system.
- 2) Both systems are allowed to run in parallel to insure that the new SCADA system works to our satisfaction. This provides the City of Lodi with the option of waiting until the new SCADA system is fully operational before the old system is shut down.
- 3) The Siemens/TeleGyr system upgrade requires less hardware, thereby, reducing the opportunity for system failures. The Siemens/TeleGyr system upgrade provides for faster takeover from failure of the on-line unit due to the speed in which each server is updated. Less training is needed due to familiarity and present use of the Siemens/TeleGyr equipment.

WHEREAS, staff seeks authorization for the non-competitive purchase of a replacement/upgrade of the master station and software for the City's Supervisory, Control and Data Acquisition (SCADA) system for the Electric Utility Department from Siemens/TeleGyr Systems, Inc., in the amount of \$165,000.00,

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Lodi does hereby approve the non-competitive purchase of a replacement/upgrade of the master station and software for the City's Supervisory, Control and Data Acquisition (SCADA) system for the Electric Utility Department from Siemens/TeleGyr Systems, Inc., in the amount of \$165,000.00.

Dated: May 2, 2001

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I hereby certify that the foregoing is a true and correct copy of Resolution No. 2001-99, which was duly and regularly passed and adopted by the City Council of the City of Lodi in a regular meeting held May 2, 2001 by the following vote:

AYES: COUNCIL MEMBERS – Hitchcock, Howard, Land, Pennino and Mayor Nakanishi

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – None

ABSTAIN: COUNCIL MEMBERS – None


SUSAN J. BLACKSTON
City Clerk